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Amendments to the Claims:

- 1. (currently amended) A method of evaluating the efficacy of a therapeutic or prophylactic treatment of *Chlamydia*-induced disease, comprising the steps of:
 - a) rationally selecting a test mouse a particular mouse strain and identifying whether said strain is a low nitric oxide (NO) responder strain or a high NO responder strain;
 - b) rationally selecting a dose of *Chlamydia* to be administered to said a test mouse of said strain;
 - c) optionally if appropriate, rationally selecting a feeding regimen with appropriate levels of arginine and feeding said test mouse according to said regimen;
 - d) optionally if appropriate, treating said test mouse with a NOS2 an inhibitor of nitric oxide synthase-2 (NOS2);
 - e) administering Chlamydia to said test mouse;
 - f) administering said therapeutic or prophylactic treatment to said test mouse; and
 - g) assessing the severity of chlamydial disease in said test mouse,

wherein the severity of chlamydial disease in said mouse differs from the severity of chlamydial disease in a reference mouse to which said therapeutic or prophylactic treatment was not administered.

- 2. (original) The method of claim 1, wherein said treatment is a prophylactic treatment and said step of administering said prophylactic treatment is performed before said step of administering *Chlamydia* to said mouse.
- 3. (original) The method of claim 1, wherein the step of administering *Chlamydia* to said mouse comprises administering between 1×10^5 and 1×10^6 IFU of *Chlamydia* to said mouse intranasally.

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4. (currently amended) The method of claim 1, wherein the step of rationally selecting a feeding regimen comprises testing said mouse strain for macrophage NO production, determining whether said mouse strain is a high NO responder strain or a low NO responder strain, and selecting a diet low in protein and arginine if said mouse strain is a high NO responder strain.

- 5. (original) The method of claim 1, wherein said feeding regimen requires feeding said mouse a diet high in arginine following prophylactic treatment.
- 6. (original) The method of claim 1, wherein said feeding regimen includes a food source having an arginine content between 0.1% and 3.0%.
- 7. (currently amended) The method of claim 1, wherein said NOS2 inhibitor is AG mouse strain is A/J.
- 8. (currently amended) The method of claim [[1]] 7, wherein the step of rationally selecting a test mouse comprises identifying a mouse strain which has a high level of NO response and selecting said test mouse from said mouse strain feeding regimen comprises selecting a diet high in protein and arginine.
- 9. (original) The method of claim 1, wherein the step of rationally selecting a dose of *Chlamydia* to be administered to said test mouse comprises evaluating the mouse strain from which said test mouse is selected to determine the LD₅₀ for said mouse strain when treated with *Chlamydia psittaci*.